

A NEW PHILIPPINE FIDDLER-CRAB.

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The most abundant species of fiddler-crab along the *esteros* near Manila has not been described. Believing the species to be new, the writer prepared the following description while he was serving as assistant professor of zoölogy in the University of the Philippines.

*Uca rathbunæ* sp. nov.

*Description*.—Length of carapace about three-fifths its greatest breadth, which is at the acute antero-lateral angles. Carapace not very convex, smooth, anterior margin somewhat arcuate; the regions all recognizable, but not clearly defined; posterior border one-half the greatest breadth; lateral margins not converging posteriorly. The crenulate line that bounds the dorsal plane on each side is well marked two-thirds of the way back and convergent posteriorly. The breadth of the front, measured between the bases of the eye-stalks, is about one-twentieth the greatest breadth of the carapace. The front is spatulate, and its raised border is wider at the ventral margin than the central groove.

Orbits somewhat oblique; borders sinuous, both crenulate; crenulations on the lower border progressively larger away from median line; a line of fine crenulations below all the upper border except the outer quarter; a row of tubercles on the floor of the orbit inside the middle third of the lower border.

Larger cheliped of male with hand nearly 3 times greater than length of carapace; merus finely granulated on outer surface, all margins denticulate, denticles larger at superior distal angle; carpus granulated on upper and outer surfaces, hairy

and denticulate on antero-internal margin. Hand with palm somewhat flattened, granulate, both borders well defined, upper border hairy on its compressed rounded posterior margin; oblique granulated ridges on inner surface of palm both well

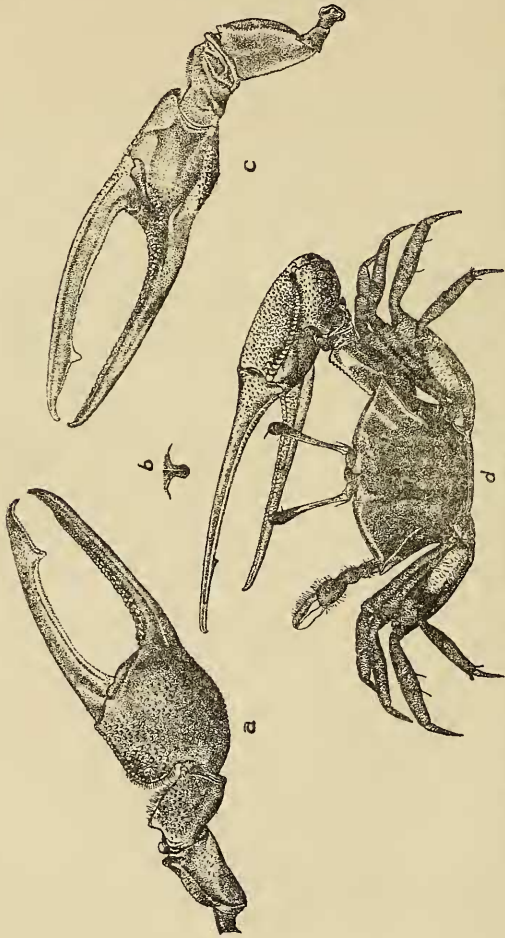


FIG. 1.—*Uca rathbunae* sp. nov.  $\times 1.5$ . a, Outer surface of cheliped of male; b, front; c, inner surface of cheliped of male; d, dorsal view of male.

defined, outer one most prominent, a well-marked elongated depression between them. Fingers rather slender, strongly flattened, minutely granular; both have a longitudinal groove on the external surface, but that in the fixed finger is the deeper; fixed finger tapering, nearly straight, hooked at the top, smooth on lower margin and denticulate on inner margin; movable finger slightly arcuate, bearing 2 strong spines on inner margin, one at the tip and the other about one-fourth of the length of the inner margin from it; most individuals also have a strong denticle on the inner margins of each of the fingers about one-third of the distance from the proximal end. Merus of last pair of legs somewhat foliaceous.

*Color of living male.*—Dorsal surface of carapace, dark brown (65)<sup>1</sup> (almost black) with a transverse yellowish-white (141) band back of the front and sometimes another spot of the same color in the center of the back; eye-stalks light brown (137). Large chela with fingers and inside of palm white, outside of palm whitish or green above (341) and fuscous (102) below. Other walking legs gray (222); back of merus of last pair of legs white; abdomen bluish (402).

The above description was taken from 69 males and 8 females, collected May 22, 1911, at an estuary three blocks south of the Philippine Medical School, Manila, P. I. The 10 largest males gave the following average measurements: Length of carapace, 14.64 mm; breadth of carapace, 24.40; length of chela 40.3. This species closely resembles *U. dussumieri* (Milne-Edwards),<sup>2</sup> but can be distinguished from it by the constant presence of a tooth on the inner margin of the movable finger near the tip, by the well-marked lines bounding lateral borders of the dorsal surface, and by the less salient character of the 2 oblique ridges on the inner surface of the palm.

Miss M. J. Rathbun has kindly compared two specimens of this species with specimens of 13 narrow-fronted species from the Indo-Pacific region in the United States National Museum. She reports that *U. rathbunæ* is most nearly related to *U. urvillei* (Milne-Edwards) and makes the following observations:

Shape of carapace much as in *U. urvillei*. The orbital margin is a little more oblique. Frontal furrow longer, not triangular and sharp pointed at the extremity as in *urvillei*, but slightly spatulate. The accessory line of granules above the lower margin of the orbit is much shorter, occupying

<sup>1</sup> The numbers following colors refer to Klincksieck, P., et Valette, T. Code des couleurs. Paris (1908).

<sup>2</sup> For references, see Alcock, *Jour. Asiat. Soc. Bengal* (1900), 69, 362.

less than one-third of the middle of the orbit, and composed of 4 or 5 granules (or on one side of one specimen it is broken into 8 smaller granules); in *urvillei* the line of granules occupies as much as one-half the length of the orbit. The granulation of wrist and hand is finer than in the related species and the granules on the lower edge of the palm are more prominent. The groove of the immovable finger is more deeply impressed at its origin. The fingers are narrower and less flattened; the immovable one has an enlarged tubercle near its middle, and the movable finger has two enlarged tubercles or small teeth, one near the middle and one not far from the tip. The merus joints of the ambulatory legs are not so wide as in *urvillei*, the difference being most noticeable in those of the last pair.

## ILLUSTRATION.

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### TEXT FIGURE.

- FIG. 1. *Uca rathbunæ* sp. nov.  $\times 1.5$ .  
a, outer surface of cheliped of male.  
b, front.  
c, inner surface of cheliped of male.  
d, dorsal view of male.